UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

NOTICE OF ALLOWANCE AND FEE(S) DUE

7590

08/28/2009

Chiron Corporation Intellectual Property PO Box 8097 Emeryville, CA 94662-8097 EXAMINER

DEVI, SARVAMANGALA J N

ART UNIT PAPER NUMBER

1645

DATE MAILED: 08/28/2009

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/615.668	07/08/2003	Antonello Covacci	CHIR-0337	6533

TITLE OF INVENTION: HELICOBACTER PYLORI CAI ANTIGEN

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	11/30/2009

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE

Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or <u>Fax</u> (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where n

maintenance fee notifica	ed below or directed oth tions. ENCE ADDRESS (Note: Use Bl	•	No Fee par	Note: A certificate of mailing can only be used for any other accompany papers. Each additional paper, such as an assignment or formal drawing, n have its own certificate of mailing or transmittal.		
	7590 08/28	/2009	hav		mailing or transmission. icate of Mailing or Trans	mission
Chiron Corporation Intellectual Property PO Box 8097			I he Sta add trai	ereby certify that this tes Postal Service with lressed to the Mail S	Fee(s) Transmittal is being a sufficient postage for firstop ISSUE FEE address 0 (571) 273-2885, on the d	g deposited with the United st class mail in an envelope above, or being facsimile
Emeryville, CA	94662-8097					(Depositor's name)
			<u> </u>			(Signature)
			L			(Date)
APPLICATION NO.	FILING DATE		FIRST NAMED INVENTOR	R A	TTORNEY DOCKET NO.	CONFIRMATION NO.
10/615,668 TITLE OF INVENTION	07/08/2003 I: HELICOBACTER PYI	LORI CAI ANTIGEN	Antonello Covacci		CHIR-0337	6533
APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE F	EE TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	11/30/2009
EXAM	IINER	ART UNIT	CLASS-SUBCLASS]		
DEVI, SARVAI	MANGALA J N	1645	536-023700	_		
 Change of correspondence address or indication of "Fee Address" (3' CFR 1.363). Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached. "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Custome Number is required. 			2. For printing on the patent front page, list (1) the names of up to 3 registered patent attorneys or agents OR, alternatively, (2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.			
PLEASE NOTE: Unl	less an assignee is ident h in 37 CFR 3.11. Comp GNEE	ified below, no assignee oletion of this form is NC	OT a substitute for filing an (B) RESIDENCE: (CIT)	patent. If an assignee assignment. Y and STATE OR CO	UNTRY)	ocument has been filed for
4a. The following fee(s)			b. Payment of Fee(s): (Ple			<u> </u>
☐ Issue Fee ☐ Publication Fee (No small entity discount permitted) ☐ Advance Order - # of Copies			☐ A check is enclosed. ☐ Payment by credit card. Form PTO-2038 is attached. ☐ The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number (enclose an extra copy of this form).			
	s SMALL ENTITY statu	is. See 37 CFR 1.27.	==		ENTITY status. See 37 Cl	
NOTE: The Issue Fee an interest as shown by the	d Publication Fee (if requeecords of the United Sta	uired) will not be accepte tes Patent and Trademarl	ed from anyone other than k Office.	the applicant; a registe	red attorney or agent; or th	ne assignee or other party in
Authorized Signature				Date		
Typed or printed name						
This collection of inform an application. Confiden submitting the complete this form and/or suggest Box 1450, Alexandria, V Alexandria, Virginia 223	tiality is governed by 35 d application form to the ions for reducing this but Virginia 22313-1450. DC	FR 1.311. The informati U.S.C. 122 and 37 CFR USPTO. Time will vary rden, should be sent to tf O NOT SEND FEES OR	on is required to obtain or 1.14. This collection is es y depending upon the indi ne Chief Information Offic COMPLETED FORMS T	retain a benefit by the timated to take 12 min vidual case. Any comer, U.S. Patent and Tr O THIS ADDRESS.	public which is to file (annutes to complete, including ments on the amount of the ademark Office, U.S. Deposend TO: Commissioner	by the USPTO to process) ig gathering, preparing, and me you require to complete artment of Commerce, P.O. for Patents, P.O. Box 1450,

PTOL-85 (Rev. 08/07) Approved for use through 08/31/2010.

OMB 0651-0033

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE



United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/615,668	07/08/2003	Antonello Covacci	CHIR-0337	6533
75	90 08/28/2009		EXAM	IINER
Chiron Corporati	on		DEVI, SARVAMANGALA J N	
Intellectual Propert			ART UNIT	PAPER NUMBER
PO Box 8097 Emeryville, CA 94662-8097			1645 DATE MAILED: 08/28/200	9

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 85 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 85 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 (571)-272-4200.

	Application No.	Applicant(s)	
	10/615,668	COVACCI ET AL.	
Notice of Allowability	Examiner	Art Unit	
	S. Devi, Ph.D.	1645	
The MAILING DATE of this communication apportant All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT R of the Office or upon petition by the applicant. See 37 CFR 1.313	(OR REMAINS) CLOSED i or other appropriate comm IGHTS. This application is	n this application. If not included unication will be mailed in due cours	se. THIS
1. This communication is responsive to <u>Applicants' amendment</u>	ent 4/28/09.		
2. X The allowed claim(s) is/are <u>claims 38-40, 45, 46, 48-50, 549, 10, 11, 12, 13, 14, 15 and 16 respectively</u> .	4, 57, 58, 62, 64, 65, 70 and	71, now renumbered as claims 1-3	<u>, 4, 5, 6-8,</u>
 Acknowledgment is made of a claim for foreign priority unally and All b) Some* c) None of the: Certified copies of the priority documents have Certified copies of the priority documents have Copies of the certified copies of the priority documents have Copies of the certified copies of the priority do International Bureau (PCT Rule 17.2(a)). * Certified copies not received: Applicant has THREE MONTHS FROM THE "MAILING DATE" noted below. Failure to timely comply will result in ABANDONN THIS THREE-MONTH PERIOD IS NOT EXTENDABLE. 	e been received. e been received in Application cuments have been received of this communication to file	on No. <u>08471491</u> . d in this national stage application fi	
4. A SUBSTITUTE OATH OR DECLARATION must be subm INFORMAL PATENT APPLICATION (PTO-152) which give			E OF
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must (a) ☐ including changes required by the Notice of Draftspers 1) ☐ hereto or 2) ☐ to Paper No./Mail Date	son's Patent Drawing Revie . s Amendment / Comment o	r in the Office action of	
Identifying indicia such as the application number (see 37 CFR 1 each sheet. Replacement sheet(s) should be labeled as such in t	the header according to 37 C	FR 1.121(d).	
 DEPOSIT OF and/or INFORMATION about the depo- attached Examiner's comment regarding REQUIREMENT 			he
Attachment(s) 1. Notice of References Cited (PTO-892)		nformal Patent Application	
2. Notice of Draftperson's Patent Drawing Review (PTO-948)	Paper No.	ummary (PTO-413), /Mail Date	
 Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date <u>05/06/09</u> 	7. 🛭 Examiner's	Amendment/Comment	
4. Examiner's Comment Regarding Requirement for Deposit of Biological Material	8. Examiner's	Statement of Reasons for Allowand	æ
or Diological Material	9.	<u>_</u>	

RESPONSE TO APPLICANTS' AMENDMENT

Applicants' Amendment

1) Acknowledgment is made of Applicants' amendment filed 05/06/09 in response to the final Office Action mailed 02/05/09.

Status of Claims

2) Claims 38, 49, 50, 54 and 57 have been amended via the amendment filed 05/06/09. Claims 44 and 72 have been canceled via the amendment filed 05/06/09. Claims 38-40, 45, 46, 48-50, 54, 57, 58, 62, 64, 65, 70 and 71 are under examination

Information Disclosure Statement

3) Acknowledgment is made of Applicants' information disclosure statement filed 10/27/08 and 05/06/09. The information referred to therein has been considered and a signed copy is attached to this Office Action.

Rejection(s) Moot

- 4) The rejection of claims 44 and 72 made in paragraph 9 of the Office Action mailed 04/09/07, made/maintained in paragraph 20 of the Office Action mailed 11/16/07, made/maintained in paragraph 12 of the Office Action mailed 05/29/08, and made/maintained in paragraph 22 of the Office Action mailed 02/05/09 under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 39 and 40 of the copending application 11/580,632, is moot in light of Applicants' cancellation of the claims.
- The rejection of claim 44 made in paragraph 22 of the Office Action mailed 05/29/08 and maintained in paragraph 23 of the Office Action mailed 02/05/09under 35 U.S.C. § 102(b) as being anticipated by Covacci *et al.* (*PNAS* 90: 5791-5795, June 1993, of record), is moot in light of Applicants' cancellation of the claim.
- 6) The rejection of claim 44 made in paragraph 25 of the Office Action mailed 05/29/08 under 35 U.S.C. § 112, first paragraph, as containing new matter, is moot in light of Applicants' cancellation of the claim.

- 7) The rejection of claim 44 made in paragraph 27 of the Office Action mailed 05/29/08 under 35 U.S.C § 112, second paragraph, as being indefinite, is most in light of Applicants' cancellation of the claim.
- 8) The rejection of claim 44 made in paragraph 29 of the Office Action mailed 05/29/08 under 35 U.S.C. § 102(b) as being anticipated by Peterson *et al.* (*Nature* 354: 369-373, 1991, of record) as evidenced by Stein *et al.* (*Mol. Microbiol.* 43: 971-980, 2002 Applicants' IDS), is moot in light of Applicants' cancellation of the claim.
- 9) The provisional rejection of claim 72 made in paragraph 22 of the Office Action mailed 02/05/09 under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 39 and 40 of the co-pending application 11/580,632, is most in light of Applicants' cancellation of the claim.

Rejection(s) Withdrawn

- 10) The provisional rejection of claims 38-40, 49, 50, 54, 62, 64, 65 and 71 made in paragraph 9 of the Office Action mailed 04/09/07, made/maintained in paragraph 20 of the Office Action mailed 11/16/07, made/maintained in paragraph 12 of the Office Action mailed 05/29/08 and made/maintained in paragraph 22 of the Office Action mailed 02/05/09 under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 39 and 40 of the co-pending application 11/580,632, is withdrawn in accordance with MPEP 804(I)(B)(1). A potential ODP rejection would be considered during the examination of the co-pending application 11/580,632.
- 11) The rejection of claims 45, 46, 49, 50, 54, 57 and 71 made in paragraph 23 of the Office Action mailed 05/29/08 and maintained in paragraph 23 of the Office Action mailed 02/05/09 under 35 U.S.C. § 102(b) as being anticipated by Covacci *et al.* (*PNAS* 90: 5791-5795, June 1993, of record), is withdrawn in light of Applicants' amendment to the claim(s) and/or the base claim.
- 12) The rejection of claims 45, 46, 49, 50, 54 and 57 made in paragraph 25 of the Office Action mailed 05/29/08 under 35 U.S.C. § 112, first paragraph, as containing new matter, is withdrawn in light of Applicants' amendment to the claim(s) and/or the base claim.

- 13) The rejection of claims 38-40, 45, 46, 48-50, 54, 57, 58, 62, 64, 65, 70 and 71 made in paragraph 27(a) of the Office Action mailed 05/29/08 under 35 U.S.C § 112, second paragraph, as being indefinite, is withdrawn in light of Applicants' amendment to the claim(s) and/or the base claim.
- **14)** The rejection of claims 39, 40, 45, 46, 48, 49, 50, 54, 57, 58, 62, 64, 65, 70 and 71 made in paragraph 27(b) of the Office Action mailed 05/29/08 under 35 U.S.C § 112, second paragraph, as being indefinite, is withdrawn in light of Applicants' amendment to the base claim.
- 15) The rejection of claims 45 and 46 made in paragraph 29 of the Office Action mailed 05/29/08 under 35 U.S.C. § 102(b) as being anticipated by Peterson *et al.* (*Nature* 354: 369-373, 1991, of record) as evidenced by Stein *et al.* (*Mol. Microbiol.* 43: 971-980, 2002 Applicants' IDS), is withdrawn in light of Applicants' amendment to the claim(s).

Remarks

- **16)** Claims 38-40, 45, 46, 48-50, 54, 57, 58, 62, 64, 65, 70 and 71, now renumbered as claims 1-3, 4, 5, 6-8, 9, 10, 11, 12, 13, 14, 15 and 16 respectively, are allowed.
- 17) Papers related to this application may be submitted to Group 1600, AU 1645 by facsimile transmission. Papers should be transmitted via the PTO Central Fax number, (571) 273-8300, which receives transmissions 24 hours a day and 7 days a week.
- Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAG or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.Mov. Should you have questions on access to the Private PAA system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (in USA or CANADA) or 571-272-1000.
- 19) Any inquiry concerning this communication or earlier communications from the Examiner should be directed to S. Devi, Ph.D., whose telephone number is (571) 272-0854. A message may be left on the Examiner's voice mail system. The Examiner can normally be reached on Monday to

Art Unit: 1645 August, 2009

Friday from 7.15 a.m. to 4.15 p.m. except one day each bi-week, which would be disclosed on the Examiner's voice mail system.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Robert Mondesi, can be reached on (571) 272-0956.

/S. Devi/ Primary Examiner AU 1645

August, 2009